

AMENDMENTS TO THE SPECIFICATION

Replace the paragraph beginning at Page 1, Line 6 with the following new paragraph:

This application is a continuation of International Application No. PCT/EP02/00361, filed January 16, 2002, now abandoned, which claims priority from German Patent Application No. 10107307.0, filed February 16, 2001. The disclosures of both applications are incorporated herein by reference.

Replace the heading at Page 1, Line 11 with the following new heading:

BACKGROUND SUMMARY OF THE INVENTION

Replace the heading at Page 2, Line 24 with the following new heading:

SUMMARY BACKGROUND OF THE INVENTION

Replace the paragraph beginning at Page 2, Line 28 with the following new paragraph:

The object is solved according to the invention by a flange yoke for a universal joint including a longitudinal axis having a first yoke half and a second yoke half. The, wherein the first yoke half has a first separation face, with which the first yoke half abuts a second separation face of the second yoke half. The, and wherein the first yoke half has a first flange plate, and the second yoke half has a second flange plate, having a first end face, which is formed by the first flange plate and the second flange plate. The, wherein the first yoke half has a first bearing portion with a first bearing bore, and the second yoke half has a second bearing portion with a second bearing bore. The, which bearing portions project, respectively, from the first end face. The, wherein the first bearing bore and the second bearing bore are arranged on a common bore axis intersecting perpendicularly the longitudinal axis, having a second end face, formed by a first connection face of the first yoke half and by a second connection face of the second yoke half, having at least one step-like recess in the first separation face of the first yoke half, formed starting from the first end face. The, wherein the recess of the first yoke half is formed by a first support face, extending, starting from

the first end face, parallel to the longitudinal axis, a first clamping face, which, starting from the first support face, intersects perpendicularly the longitudinal axis, and a first abutment face, which from the first clamping face continuous into the first connection face and which extends parallel to the longitudinal axis, having at least one step-like projection in the second separation face of the second yoke half, formed complementary to the recess. The, wherein the projection of the second yoke half in correspondence to the recess is formed by a second support face, a second clamping face and a second abutment face, which, respectively, abut the corresponding face of the first yoke half, wherein the first yoke half and the second yoke half can be detachably connected to each other by means of attachment screws. The, wherein the first yoke half has blind holes with internal threads or first through bores, extending parallel to the longitudinal axis and starting from the first clamping face, for each blind hole or for each first through bore a second through bore is arranged in the second yoke half, which, starting from the second connection face, merges in the second clamping face, and attachment screws, starting from the second connection face, are passed through the second through bores and rest in the blind holes or wherein attachment screws, starting from the second connection face are passed through the second through bores and the first through bores and rest in threaded members, supported on the first end face of the flange yoke. Thus, it is achieved, that the cross-sections of the first bearing portion and of the second bearing portion in the plane, formed by the journals of the journal cross of a universal joint, are not additionally weakened by bores for attachment screws. Furthermore, no abutment faces on the sides of the bearing portions, arranged distanced from the flange plate, have to be provided. It is prevented, therefore, that screw heads at the end of the bearing portion facing away from the flange plate, collide with components of the other flange yoke of the universal joint at larger bending angles. Furthermore, the flange yoke can be pre-assembled wherein, because of the ability of pre-assembly, tipping forces between the two yoke halves can be absorbed by the clamping faces and the attachment screws and the attachment screws are only loaded tensionwise. To prevent torsional forces in the attachment screws, the attachment screws can be

formed as expansion screws. Preferably, the attachment screws have screw ends that are taken up sunk in the second connection face. As additional attachment means, it can be provided, that in the first yoke half blind holes with internal threads are provided that extend parallel to the bore axis and that start from the first separation face, and that for each blind hole, a through bore is arranged in the second yoke half that extends parallel to the bore axis and, starting from an outer circumferential face of the second yoke half, merges in the second separation face, wherein attachments screws are passed through the through bores and rest in the blind holes. Preferably, the first support face and the second support face have means for the transmission of forces in the plane of the support faces. These can be formed in such a way that the first support face and the second support face have, respectively, a tooth as means for the transmission of forces that are formed complementary to each other. The teeth of the tooth of the first support face and the teeth of the tooth of the second support face extend preferably parallel to the longitudinal axis. Other angles in relation to the longitudinal axis are, however, also possible. The first abutment face and the second abutment face can have also means for the transmission of forces, for example, in form of toothings. To be able to transmit forces in the plane of the first clamping face and the second clamping face, these have means for the transmission of forces. These means can be formed in such a way that the first clamping face and the second clamping face have, respectively, a tooth as means for the transmission of forces that are formed complementary to each other. To absorb transversal forces, it can also be provided that in the first connection face, a groove is provided that is aligned with a corresponding groove in the second connection face, and that the grooves extend parallel to the bore axis and that in the grooves, a cotter or crosswise key rests. To center the flange yoke relative to a longitudinal axis of a mating flange, it can be provided that the first connection face and the second connection face have, respectively, means for centering the flange yoke relative to a longitudinal axis of the mating flange. Preferably the centering means is formed as Hirth-end face serration. To connect the flange yoke to a mating flange, blind holes with internal threads are provided, respectively, starting from the first connection face or from the second

connection face and extending parallel to the longitudinal axis. The connection screws rest in the blind holes. It can also be provided that, starting from the first connection face and starting from the second connection face, through bores are provided that extend parallel to the longitudinal axis and through which the connection screws can be passed. In this case the connection screws are secured by nuts on the flange yoke.

Replace the paragraph beginning at Page 7, Line 9 with the following new paragraph:

The first yoke half 1 and the second yoke half 2 are detachably connected to each other by means of attachment screws 21. For this, the first yoke half 1 has blind holes 27 (~~not shown~~) with internal threads that extend parallel to the longitudinal axis 7, starting from the first clamping face 16. For each of the first blind holes 27, a second through bore 22 is arranged in the second yoke half 2 that, starting from the second connection face 14, ends in the second clamping face 19. The attachment screws 21 are, starting from the second connection face 14, passed through the second through bores 22 of the second yoke half 2 and are screwed into the blind holes 27 with internal threads of the first yoke half 1. To prevent torsional forces in the attachment screws 21, the attachment screws 21 can be formed as expansion screws. The attachment screws 21 have screw ends that are countersunk in the second connection face 14.

Replace the paragraph beginning at Page 8, Line 17 with the following new paragraph:

Furthermore, for the tensioning of the first yoke half 1 to the second yoke half 2, through bores 23 are provided in the second yoke half 2 that, starting from an outer circumferential face 24, end in the second support face 20 and intersect the longitudinal axis 7 with distance thereto. For each through bore 23 in the second yoke half 2, a blind hole (not shown) with an internal thread is arranged in the first yoke half 1. The blind holes start from the first support face 17 and extend as extensions of the through bores 23. Attachment screws (not shown in Fig. 1, but similar to those shown at 127 in Fig. 3) are, starting from the outer circumferential face 24, passed

through the through bores 23 of the second yoke half 2 and are screwed into the blind holes with internal threads of the first yoke half 1.